

REMARKS

In the Office Action, the Examiner objected to the disclosure because of a typographical error. Applicant has corrected the typographical error. The Examiner also noted that the claims are not numbered consecutively. Applicant submits herein a correctly numbered set of claims. Applicant has also amended many of the dependent claims to indicate the correct dependency in accordance with the renumbered set of claims. The claims have in no way been narrowed by virtue of these amendments and so these amendments should not be interpreted as narrowing the claimed invention for purposes of any determination under the doctrine of equivalents. Applicant respectfully requests that the Examiner's objections to the specification be withdrawn.

Claims 1-60 are pending in the present application. In the Office Action, claims 40-60 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Poisner (U.S. Patent No. 6,012,154). The Examiner's rejections are respectfully traversed.

Poisner describes a watchdog timer 232 that may be used for detecting and/or recovering from computer system malfunctions. The watchdog timer 232 is located on an expansion bus bridge 230 and may periodically receive a reset signal from a software agent 212 via a host bus 220. If the watchdog timer 232 expires, an interrupt signal may be asserted to a processor 205. See Poisner, col. 4, l. 66- col.5, l. 9 and Figure 2. However, Applicant respectfully submits that Poisner does not teach or suggest determining an expiration of a watchdog timer on an integrated circuit and responding to a system error by a microcontroller on the integrated circuit, as set forth in independent claims 40, 47, and 54. To the contrary, Poisner teaches that the watchdog timer 232 is deployed on the expansion bus bridge 230, which is a completely separate device from the processor 205 and a software agent storage area 210 that stores the software agent 212. For at least the aforementioned reasons, Applicants respectfully submits that independent claims 40, 47,

54, and all claims depending therefrom are not anticipated by Poisner and request that the Examiner's rejections of claims 40-60 under 35 U.S.C. 102(b) be withdrawn.

In the Office Action, claims 1-5, 9-18, 22-31, and 35-39 were rejected under 35 U.S.C. 102(e) as being anticipated by Lindsay, et al (U.S. Patent Application Publication No. 2003/0028633). Claims 6-8, 19-21, and 32-34 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lindsay in view of admitted prior art. The Examiner's rejections are respectfully traversed.

Lindsay describes an ASF event controller 20 that can act to disable certain ASF functions that should not be executed in a low-power mode. For example, ASF watchdog timers 28 may be used to determine whether a device connected to a PCI bus is operating. If the device is operating, system BIOS in the device may reset the watchdog timer 28. However, if the device is not operating because of a loss of primary PCI bus power, ASF event controller 20 may set a flag 30A-B that indicates that the watchdog timer 28 should not be run.

Lindsay does not, however, teach or suggest a watchdog timer that is coupled to receive a reset input from a microcontroller upon a predetermined change in a system state and to provide an indication to the microcontroller in response to an expiration of the watchdog timer, as set forth in independent claims 1, 14, and 27. Furthermore, Lindsay does not teach or suggest a microcontroller and a watchdog timer that are formed on an integrated circuit. For at least the aforementioned reasons, Applicant respectfully submits that independent claims 1, 14, 27, and all claims depending therefrom are not anticipated by Lindsay and requests that the Examiner's rejections of claims 1-5, 9-18, 22-31, and 35-39 under 35 U.S.C. 102(e) be withdrawn.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of the cited references. To establish a *prima facie* case of obviousness, the prior art reference (or

references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). As discussed above, Lindsay fails to teach or suggest a watchdog timer that is coupled to receive a reset input from a microcontroller upon a predetermined change in a system state and to provide an indication to the microcontroller in response to an expiration of the watchdog timer, as set forth in independent claims 1, 14, and 27. Lindsay also fails to teach or suggest a microcontroller and a watchdog timer that are formed on an integrated circuit. The Examiner relies upon the admitted prior art to teach a computer system including a bridge. However, the admitted prior art fails to remedy the aforementioned deficiencies of the primary reference.

The cited references also fail to provide any suggestion or motivation to modify the reference or to combine reference teachings to arrive at Applicant's claimed invention. To the contrary, Lindsay appears to teach away from the claimed invention. First, Lindsay teaches that the system BIOS in the device may reset the watchdog timer 28, which appears to teach away from a watchdog timer on an integrated circuit that receives a reset input from a microcontroller on the integrated circuit. Second, Lindsay teaches that the device is coupled to the watchdog timer 28 by a PCI bus, which appears to teach away from a watchdog timer and a microcontroller that are on an integrated circuit. It is by now well established that teaching away by the prior art constitutes *prima facie* evidence that the claimed invention is not obvious. *See, inter alia, In re Fine*, 5 U.S.P.Q.2d (BNA) 1596, 1599 (Fed. Cir. 1988); *In re Nielson*, 2 U.S.P.Q.2d (BNA) 1525, 1528 (Fed. Cir. 1987); *In re Hedges*, 228 U.S.P.Q. (BNA) 685, 687 (Fed. Cir. 1986).

For at least the aforementioned reasons, Applicant respectfully submits that the present invention is not obvious over Lindsay in view of the admitted prior art. Applicant requests that the Examiner's rejections of claims 6-8, 19-21, and 32-34 under 35 U.S.C. 103(a) be withdrawn.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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